

In the Claims:

Claim 1 (currently amended): A rotatable feed wheel for a sheet converting machine, comprising:

(a) a hub including a rigid body having a cylindrical shape relative to an axis of rotation through said rigid body and an external peripheral surface about said rigid body; and

(b) a tread including a discontinuous annular body having a ring-shaped configuration and made of a resilient pliable stretchable deformable material, said annular body further having opposing leading and trailing ends with mateable female and male surfaces of complementary non-planar configurations defined respectively on said leading and trailing ends and forming a discontinuous non-planar join through said annular body such that said annular body can be fitted over and about, and also removed from, said rigid body of said hub by yieldably and resiliently deforming and stretching said annular body temporarily out of said ring-shaped configuration to and from a seated relationship of said annular body about and with said external peripheral surface of said rigid body of said hub and such that in said seated relationship an outer peripheral surface of said annular body is adapted to make a gripping contact with a surface of a sheet and to cause feeding of the sheet in a preselected direction when said annular body is moved in a given direction of rotation with the rotatable feed wheel about said axis of rotation;

(c) said hub and tread further including respective elements cooperating together so as to retain said annular body of said tread on and about said rigid body of said hub and prevent rotational movement of said tread relative to said hub and also to retain said non-planar mateable female and male surfaces interfitted with one another during rotation of said feed wheel;

(d) wherein said respective cooperating elements of said hub are a plurality of holes defined in said rigid body and being open at said external peripheral surface thereof;

(e) wherein said respective cooperating elements of said tread are a plurality of locking lugs formed on and protruding

inwardly of said annular body, said locking lugs having configurations complementary to configurations of said holes of said hub so as to enable said locking lugs to fit into said holes;

(f) wherein said plurality of holes in said rigid body of said hub includes first and second holes disposed in a side-by-side closely spaced apart relation to one another and being reversely angularly displaced relative to one another away from respective first and second radial lines extending from said axis of rotation through said first and second holes of said rigid body.

Claim 2 (original): The feed wheel of claim 1 wherein said non-planar mateable female and male surfaces respectively on said leading and trailing ends of said annular body of said tread have complementary female and male zigzag configurations.

Claim 3 (original): The feed wheel of claim 1 wherein said non-planar mateable female and male surfaces respectively on said leading and trailing ends of said annular body of said tread have complementary female and male V-shaped configurations.

Claim 4 (canceled).

Claim 5 (currently amended): The feed wheel of claim 1 wherein each of [[the]] said holes is of cylindrical configuration.

Claim 6 (canceled).

Claim 7 (currently amended): The feed wheel of claim [[6]] 1 wherein each of the locking lugs is of cylindrical configuration.

Claim 8 (canceled).

Claim 9 (currently amended): The feed wheel of claim [[8]] 1 wherein said plurality of locking lugs on said annular body of said tread includes first and second locking lugs respectively on said

leading and trailing ends of said annular body and being reversely angularly displaced relative to one another away from said respective first and second radial lines extending from said axis of rotation through said first and second locking lugs of said annular body and adapted to insert into said first and second holes in said rigid body of said hub such that said reversely angularly displaced holes and locking lugs provide a fish hook effect at said leading and trailing ends of said tread anchoring said tread on said hub.

Claim 10 (original): The feed wheel of claim 9 wherein said first and second holes in said rigid body of said hub are more angularly displaced relative to said radial lines than are said first and second locking lugs angularly displaced relative to said radial lines which causes stressing of said first and second locking lugs when said locking lugs are inserted into said first and second holes and thereby causes said leading and trailing ends of said annular body of said tread to be pulled together and inward toward said hub so as to maintain said non-planar mateable female and male surfaces respectively formed on said leading and trailing ends of said annular body interfitted and interlocked with one another.

Claim 11 (currently amended): The feed wheel of claim ~~[[8]]~~ 1 wherein said plurality of holes in said rigid body of said hub also includes a third hole disposed opposite from said first and second holes.

Claim 12 (original): The feed wheel of claim 11 wherein said plurality of locking lugs on said annular body of said tread also includes a third locking lug disposed on said annular body opposite from said first and second locking lugs and adapted to insert into said third hole in said rigid body of said hub.

Claim 13 (original): The feed wheel of claim 1 wherein said

tread includes at least a recess circumferentially located about said tread and formed to a preselected depth in said outer peripheral surface of said tread to enable a user to make an assessment as to the amount of said material that has worn off said outer peripheral surface and thus an outside diameter of said tread.

Claim 14 (original): A rotatable feed wheel for a sheet converting machine, comprising:

(a) a hub including a rigid body having a cylindrical shape relative to an axis of rotation through said rigid body, an external peripheral surface about said rigid body, and a plurality of holes defined in said rigid body and being open at said external peripheral surface thereof, said plurality of holes including first and second holes disposed in a side-by-side closely spaced apart relation to one another and being reversely angularly displaced relative to one another away from respective first and second radial lines extending from said axis of rotation through said first and second holes of said rigid body; and

(b) a tread including a discontinuous annular body having a ring-shaped configuration and made of a resilient pliable stretchable deformable material, said annular body further having opposing leading and trailing ends with mateable surfaces of complementary configurations defined respectively on said leading and trailing ends and forming a discontinuous join through said annular body such that said annular body can be fitted over and about, and also removed from, said rigid body of said hub by yieldably and resiliently deforming and stretching said annular body temporarily out of said ring-shaped configuration to and from a seated relationship of said annular body about and with said external peripheral surface of said rigid body of said hub and such that in said seated relationship said annular body is adapted to make a gripping contact with a surface of a sheet and to cause feeding of the sheet in a preselected direction when said annular body is moved in a given direction of rotation with the rotatable

feed wheel about said axis of rotation;

(c) said tread further including a plurality of locking lugs on said annular body having configurations complementary to configurations of said holes of said hub so as to enable said locking lugs to fit into said holes and retain said annular body of said tread on and about said rigid body of said hub so as to prevent rotational movement of said tread relative to said hub during rotation of said feed wheel and further enable said surfaces respectively on said leading and trailing ends of said annular body to contact one another and thereby retain said leading and trailing ends together, said plurality of locking lugs including first and second locking lugs respectively on said leading and trailing ends of said annular body and being reversely angularly displaced relative to one another away from said respective first and second radial lines extending from said axis of rotation through said first and second locking lugs of said annular body and adapted to insert into said first and second holes in said rigid body of said hub such that said reversely angularly displaced holes and locking lugs provide a fish hook effect at said leading and trailing ends of said tread anchoring said tread on said hub.

Claim 15 (original): The feed wheel of claim 14 wherein said first and second holes in said rigid body of said hub are more angularly displaced relative to said radial lines than are said first and second locking lugs angularly displaced relative to said radial lines which causes stressing of said first and second locking lugs when said locking lugs are inserted into said first and second holes and thereby causes said leading and trailing ends of said annular body of said tread to be pulled together and inward toward said hub so as to maintain contact between said mateable surfaces on said leading and trailing ends of said annular body.

Claim 16 (original): The feed wheel of claim 14 wherein said plurality of holes in said rigid body of said hub also includes a third hole disposed opposite from said first and second holes.

Claim 17 (original): The feed wheel of claim 16 wherein said plurality of locking lugs on said annular body of said tread also includes a third locking lug disposed on said annular body opposite from said first and second locking lugs and adapted to insert into said third hole in said rigid body of said hub.

Claim 18 (original): The feed wheel of claim 17 wherein each of said holes and locking lugs is of cylindrical configuration.

Claim 19 (original): The feed wheel of claim 14 wherein said tread includes at least a recess circumferentially located about said tread and formed to a preselected depth in said outer peripheral surface of said tread to enable a user to make an assessment as to the amount of said material that has worn off said outer peripheral surface and thus an outside diameter of said tread.

Claims 20-26 (canceled).

Claim 27 (original): A hub for a rotatable feed wheel, comprising:

- (a) a rigid body having a cylindrical shape relative to a central axis of rotation through said rigid body;

- (b) an external peripheral surface on and extending about said rigid body;

- (c) first and second holes defined in said rigid body and being disposed in a side-by-side closely spaced apart relationship to one another and open at said external peripheral surface of said rigid body such that said first and second holes are reversely angularly displaced relative to one another away from respective first and second radial lines extending through said first and second holes from said central axis of rotation; and

- (d) a third hole defined in said rigid body opposite from said first and second holes and open at said external peripheral surface of said rigid body.

Claim 28 (original): The hub of claim 27 further comprising:
means for clamping said rigid body onto a rotatable shaft for
undergoing rotation therewith about said central axis of rotation.

Claim 29 (original): The hub of claim 27 wherein each hole in
said rigid body of said hub has a cylindrical configuration.

Claim 30 (currently amended): The hub of claim 27 wherein said
peripheral surface of said rigid body defines a pair of cylindrical
shoulders extending about said rigid body and a cylindrical annular
channel recessed into said rigid body from between said cylindrical
shoulders such that said first and second holes intersect said
cylindrical shoulders and annular channel of said external
peripheral surface on [[said]] a first sector of said rigid body
and said third hole intersects said cylindrical shoulders and
annular channel of said external peripheral surface on [[said]] a
second sector of said rigid body substantially opposite from said
first sector thereof.